familiar twenty centuries ago: thence they were carried westward by the Arabs, from whom in turn they were taken over by mediaeval Europe. Recent enquirers have suggested that the introduction was due in the first instance to the "Radanite" Jewish traders of the Dark Ages, who penetrated as far as India and must necessarily have spread abroad a knowledge of the number systems used in recording prices or market computation.[1] There is extant, however, a more circumstantial account, preserved in the writings of the mediaeval Jewish philosopher and exegete, Abraham ibn Ezra (who visited London in 1158 and whose character inspired Robert Browning's famous poem). He writes:

"In olden times there was neither science nor religion among the sons of Ishmael . . . till the great king, by name Es-Saffah (750-5) arose, who heard that there were many sciences to be found in India. . . . And there came men saying that there was in India a very mighty book on the secrets of government, in the form of a fable . . . and the name of the book was *Kalilah and Dimnah.** . . . Thereupon he sent for a Jew who knew both languages, and ordered him to translate this book. . . . And when he [i.e the King] saw that the contents of the book were extraordinary—as indeed they are—he desired to know the science of the Indians, and he sent accordingly the Jew to Arin, whence he brought back one who knew the Indian numerals, besides many other astronomical writings."

A Jew was thus responsible (if this account is to be believed) for the transmission of the Hindu numerals from India to the Arabic-speaking world. How did they

make the next, and more vital, transition—from the Islamic world to the Christian?

In this process, too, Jewish agency is to be traced. One of the most active of the band of translators of

[1] Smith and Karpinski, *Hindu Arabic Numerals,* p. 101 and below, pp. 217-9.

[2] For this famous work, see above, p. 46.